

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P882616

Luminaire Tested: **NAV-SB2C-827-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882616
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9056 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

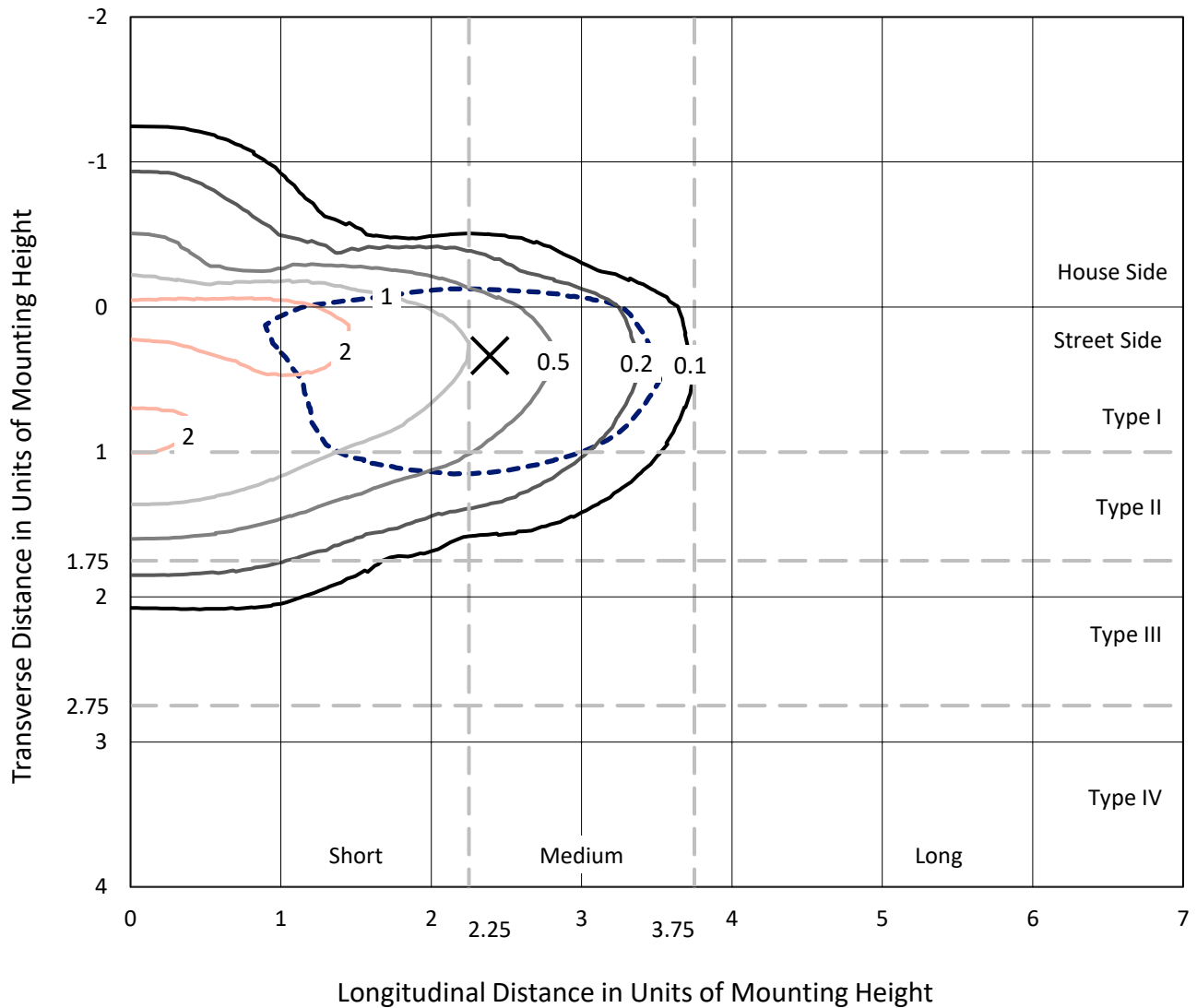
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

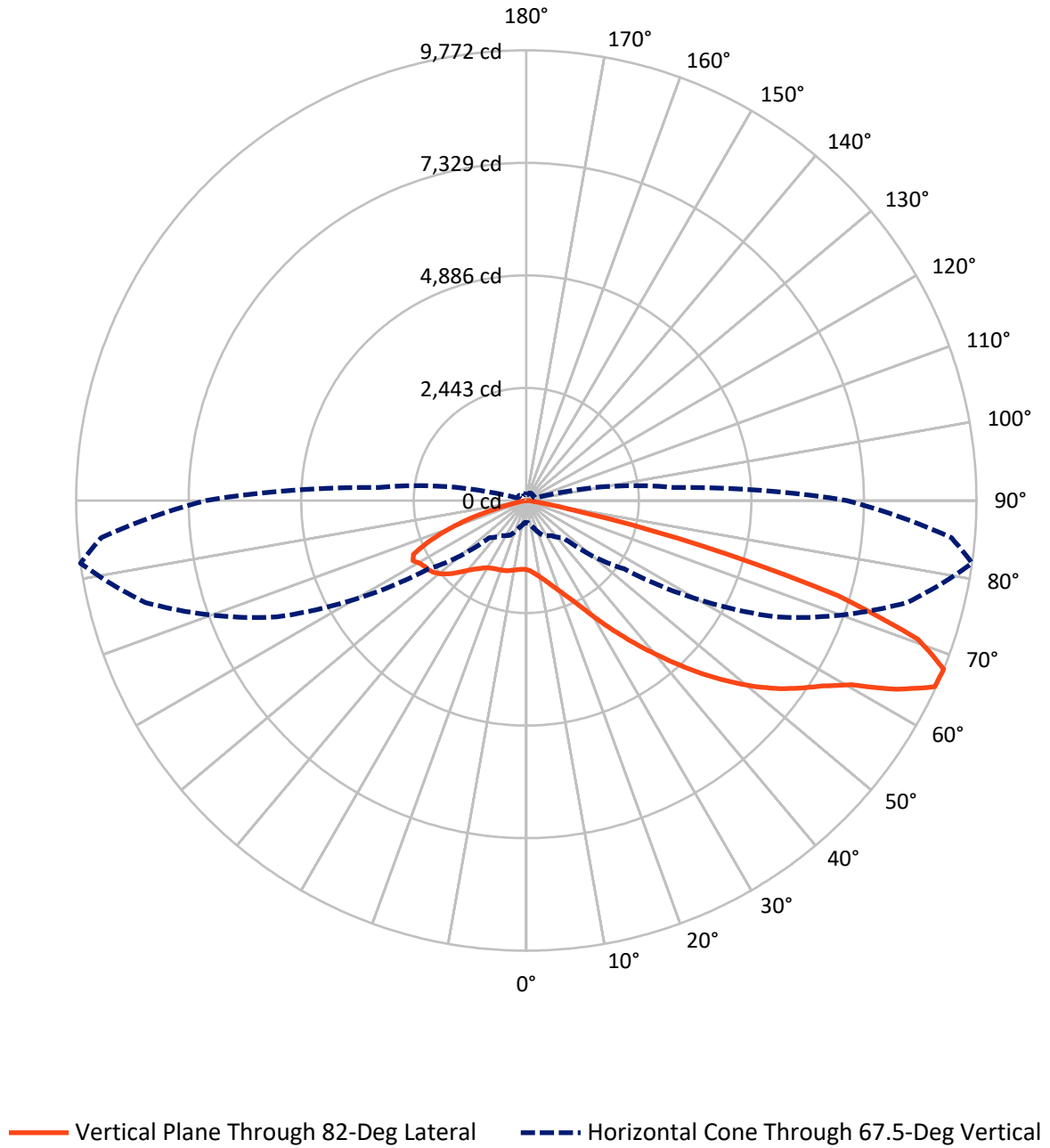
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1640.4	0.0	1640.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	7415.6	0.0	7415.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	9056.0	0.0	9056.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.7	1.5
10°-20°	347.3	3.8
20°-30°	556.3	6.1
30°-40°	983.7	10.9
40°-50°	1723.6	19.0
50°-60°	2298.8	25.4
60°-70°	2140.1	23.6
70°-80°	821.4	9.1
80°-90°	51.0	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	9056.0	100.0
0°-180°	9056.0	100.0

Coefficient of Utilization



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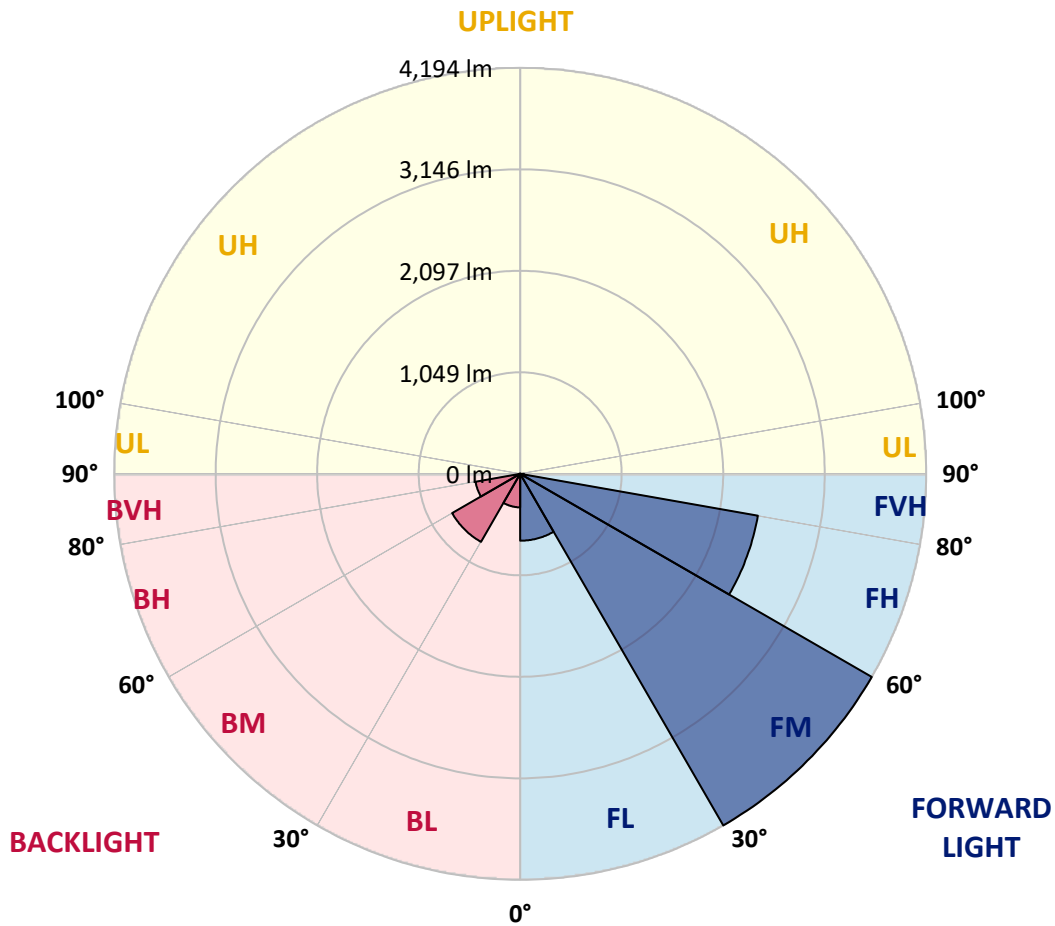
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	690.9	7.6			
FM (30°-60°)	4194.4	46.3			
FH (60°-80°)	2493.3	27.5			G2/5000
FVH (80°-90°)	37.1	0.4			G1/100
BL (0°-30°)	346.4	3.8	B1/500		
BM (30°-60°)	811.8	9.0	B1/1000		
BH (60°-80°)	468.2	5.2	B1/500		G1/500
BVH (80°-90°)	13.9	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3
2.5°	1585.7	1594.8	1589.6	1587.0	1582.4	1575.9	1570.7	1554.4	1537.4	1526.4	1522.4
5°	1617.6	1626.8	1626.1	1628.7	1632.0	1633.9	1632.6	1614.4	1590.2	1571.3	1560.3
7.5°	1590.2	1600.7	1609.2	1622.2	1645.0	1669.1	1680.9	1677.0	1652.2	1626.1	1612.4
10°	1512.7	1523.7	1544.0	1574.6	1622.9	1675.0	1718.7	1738.9	1723.3	1694.6	1675.7
12.5°	1370.5	1381.6	1421.4	1487.9	1568.7	1659.4	1742.8	1796.9	1800.8	1772.2	1750.0
15°	1210.8	1221.9	1264.2	1347.7	1470.9	1616.3	1755.9	1858.2	1892.8	1868.0	1841.3
17.5°	1111.7	1121.5	1153.4	1220.6	1349.0	1530.3	1751.3	1923.4	2002.3	1982.8	1950.8
20°	1081.7	1090.2	1105.2	1152.1	1259.0	1440.9	1721.3	1984.7	2120.3	2109.2	2073.4
22.5°	1113.6	1121.5	1126.0	1146.9	1214.0	1382.3	1683.5	2047.3	2257.3	2258.6	2214.9
25°	1187.3	1195.1	1189.9	1203.0	1232.3	1364.0	1669.1	2121.0	2429.4	2443.7	2394.2
27.5°	1308.6	1309.2	1296.8	1296.2	1300.8	1391.4	1684.1	2199.9	2646.5	2673.2	2611.9
30°	1551.8	1542.0	1494.4	1442.9	1419.4	1473.5	1725.9	2293.1	2902.7	2950.3	2873.4
32.5°	1926.7	1912.3	1825.0	1701.7	1577.9	1605.9	1800.8	2399.4	3181.8	3267.9	3174.0
35°	2333.5	2329.6	2238.3	2055.1	1838.7	1794.3	1922.8	2538.9	3486.3	3623.2	3511.7
37.5°	2711.7	2709.7	2657.6	2441.8	2178.4	2057.1	2118.4	2721.5	3812.3	4010.5	3878.8
40°	3057.3	3063.1	3011.0	2818.0	2552.6	2394.2	2384.4	2947.1	4174.8	4432.4	4275.9
42.5°	3355.9	3362.4	3309.6	3166.8	2922.3	2767.1	2711.1	3223.5	4528.9	4885.5	4700.3
45°	3558.7	3599.1	3591.3	3477.2	3301.8	3140.7	3103.6	3570.4	4932.4	5366.0	5148.9
47.5°	3616.0	3653.2	3711.9	3727.5	3620.6	3462.2	3506.5	3988.3	5340.6	5847.2	5600.1
50°	3474.6	3509.1	3631.0	3793.4	3867.7	3818.8	3898.4	4436.3	5758.5	6327.1	6042.8
52.5°	3195.5	3230.7	3384.6	3641.5	3944.7	4098.5	4291.5	4877.7	6163.4	6781.5	6462.1
55°	2791.9	2829.1	3026.6	3317.4	3798.0	4213.9	4619.5	5318.4	6534.4	7190.4	6840.2
57.5°	2242.9	2270.3	2475.7	2882.5	3428.9	4099.2	4861.4	5799.6	6883.9	7592.0	7215.1
60°	1461.8	1485.9	1724.6	2178.4	2817.3	3715.8	4909.6	6336.2	7348.1	8114.3	7720.4
62.5°	972.1	988.4	1129.9	1463.1	1984.1	2979.7	4627.3	6764.6	8028.8	9023.2	8587.0
65°	667.0	683.3	824.8	1056.9	1281.8	1971.0	3815.6	6707.9	8645.6	9744.9	9229.2
67.5°	476.0	489.7	609.6	828.7	927.8	1144.9	2586.5	5982.8	8557.0	9772.3	9263.7
70°	341.0	348.8	447.9	645.5	737.4	687.9	1438.3	4575.8	7492.2	9023.8	8558.3
72.5°	238.6	241.2	311.0	491.6	594.0	502.0	684.6	3050.8	5666.6	7082.8	6634.8
75°	161.7	165.0	209.3	360.6	476.6	383.4	362.5	1635.9	3326.5	3920.5	3514.3
77.5°	99.1	100.4	135.0	246.5	356.6	292.1	233.4	693.1	1287.1	1263.6	1077.1
80°	56.1	56.1	86.1	153.2	243.2	188.4	163.7	294.7	407.5	358.0	315.6
82.5°	31.3	31.9	62.6	95.2	161.0	111.5	90.0	136.3	176.0	155.8	135.6
85°	13.0	14.3	38.5	45.0	76.9	55.4	36.5	57.4	65.2	58.0	42.4
87.5°	1.3	2.0	11.7	8.5	9.1	11.1	5.2	11.1	9.1	9.1	6.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3	1500.3
2.5°	1510.1	1500.3	1475.5	1446.8	1409.0	1390.7	1366.0	1349.0	1334.7	1336.0	1322.9
5°	1539.4	1514.6	1459.2	1390.1	1304.0	1242.7	1177.5	1132.5	1096.0	1088.2	1070.6
7.5°	1579.8	1540.7	1443.5	1319.0	1173.6	1063.4	965.0	901.7	856.7	842.4	828.1
10°	1632.0	1575.3	1423.3	1229.7	1020.4	880.2	774.6	725.0	694.4	684.0	676.1
12.5°	1692.6	1615.0	1396.6	1120.8	862.6	727.6	660.5	635.7	625.9	622.7	620.7
15°	1768.9	1664.6	1356.2	991.7	728.9	634.4	605.7	602.5	603.8	602.5	601.8
17.5°	1859.5	1718.7	1290.3	858.7	639.0	586.8	576.4	579.0	582.2	581.6	580.3
20°	1958.6	1772.2	1206.2	740.7	577.7	552.9	547.0	549.6	552.3	550.9	550.3
22.5°	2071.4	1829.5	1113.0	648.7	536.6	521.6	515.1	515.7	515.7	513.1	511.8
25°	2206.4	1892.8	1015.2	583.5	505.3	493.6	485.7	483.1	479.2	471.4	470.1
27.5°	2367.4	1959.9	921.3	537.9	480.5	469.4	460.3	453.8	444.0	431.0	429.7
30°	2548.7	2041.4	841.7	509.2	461.0	449.9	439.5	429.7	415.3	399.0	397.7
32.5°	2761.9	2128.8	783.7	490.3	443.4	431.6	419.2	407.5	391.9	375.6	376.2
35°	3016.2	2234.4	749.8	477.3	429.7	414.0	400.3	387.3	375.6	361.2	359.9
37.5°	3292.0	2346.6	739.4	470.8	420.5	396.4	380.8	371.6	370.3	361.9	361.2
40°	3593.9	2479.6	747.2	466.8	410.8	379.5	362.5	360.6	363.8	348.8	349.5
42.5°	3913.4	2637.4	760.2	462.3	397.1	362.5	346.2	346.2	343.6	322.7	322.7
45°	4258.9	2819.3	773.3	451.2	380.8	345.6	333.2	328.6	317.5	297.3	296.7
47.5°	4607.1	3004.5	783.1	431.0	361.2	331.2	320.1	309.7	293.4	275.1	274.5
50°	4937.7	3170.7	772.6	401.0	339.0	317.5	305.8	291.4	273.8	261.5	259.5
52.5°	5233.0	3314.8	728.3	365.8	315.6	303.2	292.8	277.8	263.4	250.4	249.1
55°	5489.9	3431.5	650.1	332.5	294.7	290.8	280.4	261.5	241.9	230.8	229.5
57.5°	5736.4	3520.2	552.3	305.1	275.8	277.1	261.5	244.5	226.2	214.5	213.2
60°	6064.3	3638.9	453.1	279.7	255.6	259.5	242.5	230.2	207.3	192.3	190.4
62.5°	6588.6	3823.4	359.9	248.4	232.1	233.4	226.2	211.3	183.9	166.3	165.0
65°	7004.5	3755.6	283.6	214.5	205.4	207.3	207.3	191.0	161.7	141.5	139.5
67.5°	6957.6	3215.7	226.2	181.3	180.0	181.3	185.8	172.1	143.4	127.1	124.5
70°	6409.2	2557.8	181.3	150.6	156.5	153.2	166.3	157.1	129.1	112.8	110.8
72.5°	5229.8	1842.6	138.2	124.5	120.0	125.2	150.0	141.5	107.6	89.3	87.4
75°	3056.0	983.2	103.0	98.5	86.7	104.3	133.0	120.6	82.2	65.9	63.9
77.5°	995.0	343.0	75.6	72.4	64.5	84.1	113.4	101.7	67.2	52.2	50.2
80°	266.7	103.7	51.5	47.6	41.7	62.6	90.0	80.8	48.2	33.9	33.3
82.5°	106.9	43.7	30.0	26.7	22.8	43.0	71.1	65.2	35.9	21.5	21.5
85°	34.6	14.3	11.1	8.5	10.4	26.7	42.4	44.3	25.4	11.1	8.5
87.5°	4.6	2.0	2.0	2.6	2.0	4.6	13.0	12.4	7.2	1.3	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)